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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,661	08/24/2001	Kenji Oshima	2001_1135A	1004
513	7590	05/26/2004	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			SHOSHO, CALLIE E	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/935,661	OSHIMA, KENJI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Callie E. Shosho	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 5/10/04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Applicants' response filed 5/10/04 overcomes all outstanding rejections of record.

In light of the new grounds of rejection as set forth below, the finality of the previous office action mailed 3/8/04 has been withdrawn, and thus, the following action is non-final.

**Claim Rejections - 35 USC § 102**

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3-5, and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Swift et al. (U.S. 4,388,434) taken in view of the evidence in Takao et al. (U.S. 6,627,696).

Swift et al. disclose ink comprising aliphatic hydrocarbon solvent having boiling point of 475-700 °F or 246 to 371 °C, polymer that is soluble in the aliphatic hydrocarbon solvent and is obtained from monomers including butyl acrylate, ethylhexyl acrylate, and decyl methacrylate, colorant that is insoluble in the solvent such as carbon black, and metal soap that is manganese naphthenate or cobalt naphthenate. There is also disclosed a method wherein the above ingredients are mixed to form ink (abstract, col.3, lines 44-53, col.4, lines 27-35 and 59-62, col.6, lines 13-41, and col.11, lines 49-50). Although there is no disclosure that the aliphatic hydrocarbon solvent possesses volume resistivity as presently claimed, it is well known, as evidenced by Takao et al. (col.2, lines 28-30), that aliphatic hydrocarbon solvents inherently possess resistivity of not less than  $10^9 \Omega\text{cm}$ .

Attention is drawn to col.11, lines 41-50 of Swift et al. which disclose ink comprising aliphatic hydrocarbon solvent, i.e. Magie Oil, colorant, i.e. Phthalo Blue, polymer obtained from monomers including butyl acrylate, and manganese naphthenate and cobalt naphthenate metal soap.

Using the specification as a dictionary in order to define  $\zeta$  potential of the colorant, it is noted that page 14, lines 27-29 of the present specification discloses that it is the metal soap and the polymer that imparts  $\zeta$  potential to the colorant. Thus, given that Swift et al. disclose ink comprising metal soap and polymer identical to those presently claimed, it is clear that the colorant of Swift et al. will inherently possess  $\zeta$  potential as presently claimed.

In light of the above, it is clear that Swift et al. anticipate the present claims.

**Allowable Subject Matter**

4. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 6 would be allowable if rewritten in independent form as described above given that the "closest" prior art Swift et al. (U.S. 4,388,434) is drawn to lithographic ink with no disclosure or suggestion of electrostatic ink jet recording apparatus comprising the ink as required in present claim 6.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
5/19/04